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| 10/761,537 | 01/21/2004 | David W. Brown | P214419 | 3298 |

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| EXAMINER |
| CABRERA, ZOILA E |

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| ART UNIT | PAPER NUMBER |
| 2125 | |

DATE MAILED: 03/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/761,537

Applicant(s)

BROWN ET AL.

Examiner

Zoila E. Cabrera

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters; prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-73,86-97,122-132,148-174 and 183-190 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-73,86-97,122-132,148-174 and 183-190 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/26/04; 9/7/04; 4/20/05; 2/24/06
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-17, 74-85, 98-121, 133-147, 175-182, 191-192 have been cancelled.
Claims 18-73, 86-97, 122-129, 130-132, 148-174, 183-190 are remained for consideration.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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Claims 18, 26, 35, 49, 62 and 86 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-16 of U.S. Patent No. 6,941,543. Although the conflicting claims are not identical, they are not patentably distinct from each other because the organizational elements in both claims and their functionality are merely obvious variations of each other. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to realize that the limitations of claims 18, 26, 35, 49, 62 and 86 are already included in U.S. Patent No. 6,941,543, as such they are an obvious variation of the invention, defined in the claims 1-16 of Patent No. 6,941,543.

Claims 18, 26, 35, 49, 62 and 86 are rejected under the judicially created doctrine of double patenting over the following U.S. Patents:

6,513,058; 5,867,385; 6,516,236; and 5,691,897

since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent. A quick review of the listed documents has shown possible obviousness double patenting issues, however, a complete analysis has not been performed due to the number of patents and applications and the undue burden to the examiner to perform these comparisons. The patents and applications have a common assignee, at least one common inventor and common subject matter. The applicant is instructed to provide either terminal disclaimers for the listed documents or provide an explanation as to how the present invention claims specifically read over the claims and coverage of the listed documents.

Claim Objections

3. Claim 129 is objected to because of the following informalities: Claim 129 recites "(Reserved)". Appropriate correction is required. Therefore, claim 129 has not been treated on the merits.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 62 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The steps of claims 49 simply manipulates abstract ideas without any concrete output. Please note that the language of claim 49 is directed merely to an abstract idea that recite software for communicating with a motion control device but it does not positively recite the concrete output from the "commanding" software. The claim language is not tied to a technological art, environment, or machine which would result in a practical application producing a **concrete, useful, and tangible result** to form the basis of statutory subject matter under 35 U.S.C. 101.

To expedite a complete examination of the instant application claim 62 rejected under 35 U.S.C. 101 (non-statutory) above is further rejected as set forth below in anticipation of applicant amending these claims to place them within the four statutory categories of invention.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 18-73, 86-97, 122-128, 130-132, 148-174, and 183-190 are rejected under 35 U.S.C. 102(e) as being anticipated by **Tanaka (US 2002/0044297 A1)**.

As for claim 18, Tanaka discloses a system for commanding at least one motion control device (Fig. 2), comprising:

A set of motion operations ([0034]-[0042], i.e., for each print command the printer has to move or actuate the corresponding tools to perform a dot drawing, circle drawing, linear drawing, etc.);

A set of software drivers, where at least one software driver is selectable and associated with at least one motion control device ([0035]-[0042], driver commands); and a software system for selecting at least one selectable software driver from the set of software drivers (Fig. 2, Graphics Engine corresponds to the software system; [0052], a printer driver 3 converts the printer driver command from the graphics engine 2 into a printer command and supplies this command to a printer 4. Please note that the driver command is selected by the graphics engine) and calling a set of component function

calls to command at least one motion control device associated with the at least one selectable software driver based on the at least one selected software driver such that at least one motion control device performs at least one motion operation ([0006]; [0023], i.e. a figure drawing function is called by the graphics engine to command the printer or motion control device which is associated with the printer driver in order to print a dot drawing,, circle drawing, etc.; [0051-[0052]; [0058])).

As for claim 26, the same citations applied to claim 18 above apply as well for this claim. Regarding the limitations of "an application program comprising a set of component function calls that is capable of directing at least one motion control device to perform at least one motion operation (Fig. 2, Graphics engine). Furthermore, please note that the commanding is based on both the printer driver and drawing function called by the graphics engine (Fig. 6).

As or claim 35, the same citations applied to claims 18 and 26 above apply as well for this claim.

As for claim 49, 62, 86 the same citations applied to claims 18 and 26 above apply as well for these claims. Please note that instead of commanding the limitation "communicating" is claimed which inherently reads on commanding.

As for claims 19-25, Tanaka further discloses:

19. A user interface that allows a user to select the at least one selectable software driver (Fig. 1; Display device);

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20. A system as recited in claim 18, in which the software system comprises a selection interface that allows the at least one selectable software driver to be selected programmatically (Fig. 6).

21. A system as recited in claim 18, in which at least one motion operation is capable of causing data to be sent to at least one motion control device and at least one motion operation is capable of causing data to be received from at least one motion control device (Fig. 4; command data sent to printer and the received printed output).

22. A system as recited in claim 18, in which at least one motion operation is capable of being used to monitor at least one motion control device and at least one motion operation is capable of causing the motion control device to be configured ([0054]; [0075]).

23. A system as recited in claim 18, in which at least one of the software drivers in the set of software drivers conforms to a common driver interface (Fig. 2, printer driver 3).

24. A system as recited in claim 23, in which the common driver interface comprises a set of component functions that are exposed to the software system by at least one of the software drivers (Fig. 6, i.e., Is printer driver capable of circle Drawing, rectangle drawing, etc.).

25. A system as recited in claim 23, in which the software system communicates with the at least one motion control device through the common driver interface of the software driver associated with the at least one motion control device (Fig. 2).

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Regarding claims 27-34, 36-48, 50-61, 63-73, 87-97, and 122-128, 130-132, 160-162, 167-170, 183-186, the same citations applied to claims 19-25 apply as well for these claims.

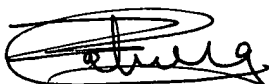
As for claims 148-159, 163-166, 171-174, 187-190 please note that a definition of graphics engine or printer driver can be acquired from the operating system or storage of the computer (Fig. 2; [0049]).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning communication or earlier communication from the examiner should be directed to Zoila Cabrera, whose telephone number is (571) 272-3738. The examiner can normally be reached on M-F from 8:00 a.m. to 5:30 p.m. EST (every other Friday).

If attempts to reach the examiner by phone fail, the examiner's supervisor, Leo Picard, can be reached on (571) 272-3749. Additionally, the fax phones for Art Unit 2125 are (571) 273-8300. Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist at (703) 305-9600.



Zoila Cabrera
Patent Examiner
3/3/06